

ABSTRACT OF THE DISCLOSURE

Provided is a semiconductor reliability evaluating apparatus for evaluating an electro-migration characteristic of a wiring layer which is capable of being formed simply and in a low cost using a reticle set, having a minimum number of reticles, which is capable of measuring an ordinary via plug resistance where the number of wiring layer is two. A first wiring layer is connected to a second wiring layer with a plurality of via plugs formed in an insulating layer which is placed between the first and second wiring layers, the wiring layers are made of metals having almost same specific resistances, and each different parasitic resistances are put to at least one of the first wiring layer and the second wiring layer connected to each of the plurality of via plugs to make the total resistance value of the current path through each of the plurality of via plugs different.